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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/623,068	07/18/2003	Hans-Jorg Timme	Z&PINFN10356	2691
24131 7590 03/21/2007 LERNER GREENBERG STEMER LLP				INER
P O BOX 2480			GHYKA, ALEXANDER G	
HOLLYWOOL	D, FL 33022-2480		ART UNIT PAPER NUMBER	
			2812	
SHORTENED STATUTOR	Y PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
3 MO	NTHS	03/21/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

	· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)			
Office Action Summary		10/623,068	TIMME ET AL.			
		Examiner	Art Unit			
		Alexander G. Ghyka	2812	•		
Period fo	The MAILING DATE of this communication ap r Reply	pears on the cover sheet wit	h the correspondence address			
WHIC - Exter after: - If NO - Failur Any r	ORTENED STATUTORY PERIOD FOR REPL HEVER IS LONGER, FROM THE MAILING Designs of time may be available under the provisions of 37 CFR 1. SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period to reply within the set or extended period for reply will, by statuted patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION OF THIS COMMUNICA	CATION. Sply be timely filed THS from the mailing date of this communication ANDONED (35 U.S.C. § 133).			
Status						
1)[]	Responsive to communication(s) filed on					
	` ` ,	is action is non-final.				
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
r	closed in accordance with the practice under	•	•			
Dispositi	on of Claims			•		
4)🖂	Claim(s) 1-29 and 32-34 is/are pending in the	application.				
	4a) Of the above claim(s) <u>1-21</u> is/are withdraw	vn from consideration.	ALEXANDER GHYKA			
5)	Claim(s) is/are allowed.		PRIMARY EXAMINER			
6)⊠	Claim(s) 22-29 and 32-34 is/are rejected.		Av 2812			
7)	Claim(s) is/are objected to.					
8)	Claim(s) are subject to restriction and/	or election requirement.	Why Sla			
Applicati	on Papers					
9) 🗌 🤈	The specification is objected to by the Examin	ier.				
10)	The drawing(s) filed on is/are: a)☐ ac	cepted or b) Objected to t	by the Examiner.			
	Applicant may not request that any objection to the	e drawing(s) be held in abeyan	ce. See 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the correct			d).		
11)[]	The oath or declaration is objected to by the E	Examiner. Note the attached	Office Action or form PTO-152.			
Priority u	nder 35 U.S.C. § 119	•				
•	Acknowledgment is made of a claim for foreig ☐ All b)☐ Some * c)☐ None of:	n priority under 35 U.S.C. §	119(a)-(d) or (f).			
	1. Certified copies of the priority documer	nts have been received.				
	2. Certified copies of the priority documer					
	3. Copies of the certified copies of the price.	-	received in this National Stage			
	application from the International Burea	` ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '		•		
* S	See the attached detailed Office action for a lis	st of the certified copies not	received.			
		•				
Attachmen		,				
· —	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948)	,	ummary (PTO-413))/Mail Date			
3) Inform	mation Disclosure Statement(s) (PTO/SB/08)	5) Notice of Ir	formal Patent Application			
Pape	r No(s)/Mail Date	6)	·			

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DETAILED ACTION

Applicants' response of 11/20/2006 has been considered and entered in the record. Claims 22-29 and 32-34 are under consideration. Applicants' arguments have been considered but they are not persuasive for the reasons as discussed below.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22-24 and 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Funada et al (US 6,078,299) for the reasons of record.

Response to Applicants' Arguments

Applicants' argue that Funada explicitly discloses that the bump (16) connects the piezoelectric substrate (11) (Examiner's carrier substrate) to the circuit substrate (12) (Examiner's capping substrate). Applicants argue that Funada et al does not disclose a wiring substrate and does not disclose that the bump (16) connects a filter to a wiring substrate. Applicants argue that Funada et al does not disclose a carrier substrate and a capping substrate are connected to a wiring substrate by an

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interconnection.

The Examiner notes that Funada et al disclose that electrical power is supplied to the piezoelectric substrate from the circuit substrate via electrode pads. See the Abstract. Moreover, Funada et al disclose forming conductive layers on the back and the side of the piezoelectric substrate and connecting them to a ground electrode. See column 6, lines 55-60. The Examiner states that it would be inherent that the electrical power supplied to the piezoelectric substrate would be supplied by a wiring substrate, and therefore the Funada reference discloses all of the claimed limitations. Therefore, Funada et al anticipates all of the claimed limitations.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funada et al (US 6,078,299) in view of Tanski (US 4,409,570) for the reasons of record.

Claims 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funada et al (US 6,078,299) in view of Penumuri (US 5,287,036) for the reasons of record.

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Claims 32-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Funada et al (US 6,078,299) in view of Yamada (US 5,932,950) for the reasons of record.

Response to Applicants' Arguments

Applicants argue that the Funada et al reference does not disclose the claimed limitations. The rejections are maintained as discussed above with respect to the Funada et al reference.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander G. Ghyka whose telephone number is (571)

272-1669. The examiner can normally be reached on Monday through Friday during general business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lebentritt can be reached on (571) 272-1873. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AGG March 17, 2007

> ALEXANDER GHYKA PRIMARY EXAMINER